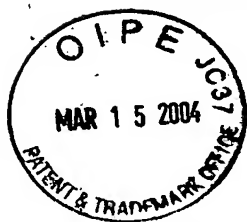


DOCKET NO.: HOE-0872

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Narasimhan, et al.

Application No.: 10/734,048

Filing Date: December 10, 2003

Confirmation No.:

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

For: METAL-BASED POWDER COMPOSITIONS CONTAINING SILICON

DATE OF DEPOSIT:

3/12/04

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

TYPED NAME: Stephen C. Timmins
REGISTRATION NO.: 48,481

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date

of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached;
or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).

- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.
- ☐ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☐ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

EXCEPT THAT:

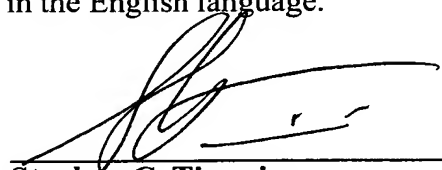
- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
- ☒ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
 - ☒ Copies of references **1 thru 44** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. **10/008,065**, filed **November 5, 2001**.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

There are no listed references which are not in the English language.

Date:

3/12/04



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Registration No. 48,481

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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. HOE-0872	Application No. 10/734,048
		Applicant Narasimhan, et al.	
		Filing Date December 10, 2003	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	1	Klein, A.N. et al., "High Strength Si-Mn-Alloyed Sintered Steels," <i>Powder Metallurgy International</i> , 1985, 17(1), 13-16	
	2	Klein, A.N. et al., "High Strength Si-Mn Alloyed Sintered Steels," <i>Powder Metallurgy International</i> , 1985, 17(2), 71-74	
	3	Mitchell, S.C. et al., "Microstructure and Mechanical Properties of Mn-Cr-Mo-C Steels Sintered at >1140C," <i>1999 International Conference on Powder Metallurgy & Particulate Materials</i> , June 20-24, 1999, 1-15	
	4	Salak, A., "Iron-Based Sintered Materials," in <i>Ferrous Powder Metallurgy</i> , 1990, 235-237	
	5	Aksas, H.P., et al., "A dilatometric study of sintering iron-VC, WC composites," from <i>Modern Developments in Powder Metallurgy, Proceedings of the 1980 International Powder Metallurgy Conference, June 22-27, 1981, 14, 335-345</i>	
	6	Banerjee, S., et al., "New results in the master alloy concept for high strength sintered steels," from <i>Modern Developments in Powder Metallurgy, Proceedings of the 1980 International Powder Metallurgy Conference, June 22-27, 1981, 13, 143-157</i>	
	7	Kaufman, S.M., "The use of master alloys for producing low alloy P/M steels," from <i>Modern Developments in Powder Metallurgy, Proceedings of the 1976 International Powder Metallurgy Conference, 1977, 10, 1-13</i>	
	8	Pandey. O.P., et al., "Production and characterization of rapidly solidified powders of Al-Si alloys," <i>PMI</i> , 1991, 23(5), 291-295	
	9	Salak, A., "High-strength sintered manganese steel," from <i>Modern Developments in Powder Metallurgy, Proceedings of the 1980 International Powder Metallurgy Conference, June 22-27, 1981, 13, 183-201</i>	
	10	Smarsly, W., et al., "Microstructure and texture of combined die forged (CDF) prealloyed Ti-6Al-4V powder compacts," 1985, 17(2), 63-67	
EXAMINER		DATE CONSIDERED	

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. HOE-0872	Application No. 10/734,048
		Applicant Narasimhan, et al.	
		Filing Date December 10, 2003	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	11	Thümmier, et al., "Sintered steels with high content of hard phases: a new class of wear resistant materials," <i>Power Metallurgy</i> , 1991 , 23(5), 285-290	
	12	Zapf, G., et al., "Introduction of high oxygen affinity elements maganese, chromium and vanadium in the powder metallurgy of P/M parts," from <i>New Perspectives in Powder Metallurgy</i> , 1990 , 9, 129-156	
	13	Kalogeropoulou, S., et al., "Relationship between wettability and reactivity in Fe/SiC system," <i>Acta Metall. Mater.</i> , 1995 , 0956-7151(94)00336-X, 43(3), 907-912	
*	14	Klein, A.N. et al., <i>Ferrous Powder Metallurgy</i> , 1995	
	15	Salak, A., et al., <i>Ferrous Powder Mettallurgy</i> , <i>Cambridge International Science Publishing</i> , 1995 , 4 pages	
EXAMINER		DATE CONSIDERED	

A copy of this reference will not be forwarded to the U.S. Patent and Trademark Office since it is believed to be too voluminous

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. HOE-0872	Application No. 10/734,048
	Applicant Narasimhan, et al.	
	Filing Date December 10, 2003	Group Not Yet Assigned

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Examiner Initial		Document No.	Date	Name	Class	Subclass
	16	4,483,905	11/20/84	Engström	428	570
	17	4,676,831	06/30/87	Engström	75	252
	18	4,834,800	05/30/89	Semel	106	406
	19	5,484,469	01/16/96	Rutz, et al.	75	252
	20	5,498,276	03/12/96	Luk	75	252
	21	5,538,684	07/23/96	Luk, et al.	419	66
	22	5,624,631	04/29/97	Luk	419	23
	23	5,069,714	12/03/91	Gosselin	75	252
	24	5,108,493	04/28/92	Causton	75	255
	25	5,290,336	03/01/94	Luk	75	231

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Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	26	WO 99/20689	04/29/99	PCT	X	

EXAMINER	DATE CONSIDERED
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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. HOE-0872	Application No. 10/734,048
	Applicant Narasimhan, et al.	
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U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	27	5,298,055	03/29/94	Semel, et al.	75	252
	28	5,330,792	07/19/94	Johnson, et al.	427	217
	29	5,368,630	11/29/94	Luk	75	252
	30	5,902,373	05/11/99	Vannman, et al.	75	352
	31	5,641,922	06/24/97	Shivanath, et al.	75	231
	32	6,019,937	02/01/00	Shivanath, et al.	419	14
	33	3,725,142	04/03/73	Huseby	148	16
	34	3,853,572	12/10/74	Herron, et al.	106	284
	35	4,863,515	09/05/89	Roberts, et al.	75	238
	36	5,403,372	04/04/95	Uchida	75	236

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Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO

EXAMINER	DATE CONSIDERED
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				Applicant Narasimhan, et al.			
				Filing Date December 10, 2003		Group Not Yet Assigned	
U. S. PATENT DOCUMENTS							
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	37	5,674,449	10/07/97	Liang, et al.	420	12	
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	39	6,015,446	01/18/00	Rochl	75	243	
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	43	6,364,927 B1	04/02/02	Narasimhan, et al.	75	252	
	44	6,482,354 B1	11/19/02	Wert, et al.	420	10	
FOREIGN PATENT DOCUMENTS							
Examiner Initial		Document No.	Date	Country	Translation		
					YES	NO	
EXAMINER				DATE CONSIDERED			